



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/874,035	06/06/2001	Gerard Jaeger	Q64439	7609

7590 04/14/2004
SUGHRUE, MION, ZINN, MACPEAK & SEAS, PLLC
2100 Pennsylvania Avenue, N.W.
Washington, DC 20037-3202

EXAMINER

OLSEN, KAJ K

ART UNIT PAPER NUMBER

1753

DATE MAILED: 04/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/874,035

Applicant(s)

JAEGER, GERARD

Examiner

Kaj Olsen

Art Unit

1753

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 January 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3, 5 and 6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5, 6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 6-6-01.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Art Unit: 1753

DETAILED ACTION

Information Disclosure Statement

1. The examiner has enclosed applicant's initialed IDS from the previous office action. The examiner noticed that he neglected to initial the listing under "Other Documents". That has now been rectified.

Claim Rejections - 35 USC § 103

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Claims 1-3 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 06-288964 in view of Saurer et al (USP 5,395,504). JP '964 is being relied on for the first time with this office action. Its use here was necessitated by the amendment to the claims. The examiner is enclosing a machine translation of the JP '964 by the JPO Industrial Property Digital Library website.

4. JP '964 discloses an electrochemical sensor comprising a structure that could reasonably be construed as being a "tongue" giving the claim language its broadest reasonable interpretation (see fig. 2). JP '964 discloses a thin substrate 1 supporting at least two current conducting strips (2a, 2b) separated by a narrow insulating strip of the substrate (paragraph 0002). JP '964 further discloses covering said substrate and said strips being with a plastic covering 6 into which are cut, at one end-end, an opening allowing portions of strip (5a, 5b) to appear for connection to an electronic apparatus, and, close to the other end-end, two windows (6a, 6b) separated by a strip of the covering (see fig. 2). Said windows delimiting on the strips the useful surfaces of a

Art Unit: 1753

reference electrode beneath a first reference window 6b and a measuring electrode beneath a second measuring window 6a (paragraphs 0002 and 0004). JP '964 further discloses that the second window is coated with a reagent of the constituent whose concentration one wishes to determine (paragraph 0004). The measuring window of JP '964 is circular, which would read on the term "rounded" giving the claim language its broadest reasonable interpretation. JP '964 does not explicitly disclose an elongated window. Saurer discloses in an alternate electrochemical sensor that a number of window contours shapes are known in the art including circular and elliptical. See fig. 1, 2, 4, 6 and 7, and col. 5, lines 56-60. An elliptical shaped window would read on "elongated contour" giving the claim language its broadest reasonable interpretation. It would have been obvious to one of ordinary skill in the art at the time the invention was being made to utilize the teaching of Saurer for the sensor of JP '964 because the substitution of one known window shape for another requires only routine skill in the art.

5. It is unclear if JP '964 explicitly teaches the use of a plastic substrate (see paragraph 0003). However, in the event that JP '964 does not explicitly teach the use of a plastic substrate, Saurer teaches that plastic is a conventional material that finds utility as a substrate in view of its insulating properties (col. 5, lines 22-30). It would have been obvious to one of ordinary skill in the art at the time the invention was being made to utilize the teaching of Saurer for the sensor of JP '964 to ensure the electrodes are appropriately insulated from each other.

6. With respect to the window being symmetrical about the narrow insulating strip, see fig. 2 of JP '964. With respect to a "coffee bean configuration", an ellipse would read on "coffee bean configuration" giving the claim language its broadest reasonable interpretation.

Art Unit: 1753

7. With respect to the enzyme, see JP '964 paragraph 0002. Although JP '964 doesn't appear to teach the use of a mediator, mediators are a well known means for detecting an enzymes response (see Saurer, col. 5, lines 64-68).
8. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over JP '964 and Saurer in further view of Graetzel et al (USP 5,378,628).
9. The references set forth all the limitations of the claims, but did not explicitly recite the use of the set forth mediators. Graetzel discloses some of the claimed mediators (see table 1) and further discloses that these mediators have a number of advantages over conventional mediators including good electrochemical potential, solubility and stability (col. 2, lines 49-54). It would have been obvious to one of ordinary skill in the art at the time the invention was being made to utilize the teaching of Graetzel for the sensor of JP '964 and Sauer in order to provide good electrochemical performance and good shelf life for the sensor.

Response to Arguments

10. Applicant's arguments concerning the 112 rejection of coffee bean configuration was persuasive and the examiner has withdrawn that rejection. Applicant's amendment has overcome the rejection of Saurer as a primary teaching because Saurer's windows do not have rounded contours. However, a new grounds of rejection was necessitated by this amendment.

Art Unit: 1753

Conclusion

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kaj Olsen whose telephone number is (571) 272-1344. The examiner can normally be reached on Monday through Thursday from 6:30 A.M. to 4:00 P.M. and on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nam Nguyen, can be reached on 571-272-1342. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

Art Unit: 1753

applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Kaj Olsen', with a long horizontal flourish extending to the right.

Kaj Olsen Ph.D.
Primary Examiner
AU 1753
April 7, 2004